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JAN 26 2006
IAP35
PATENT & TRADEMARK OFFICE

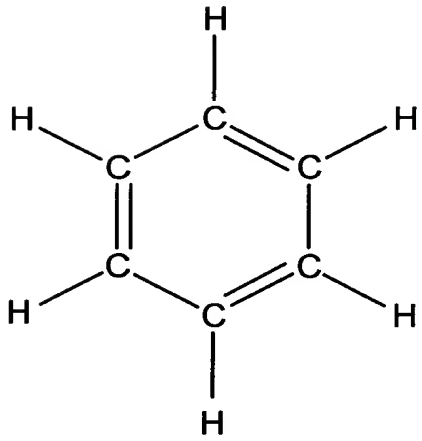


FIG. 1
PRIOR ART

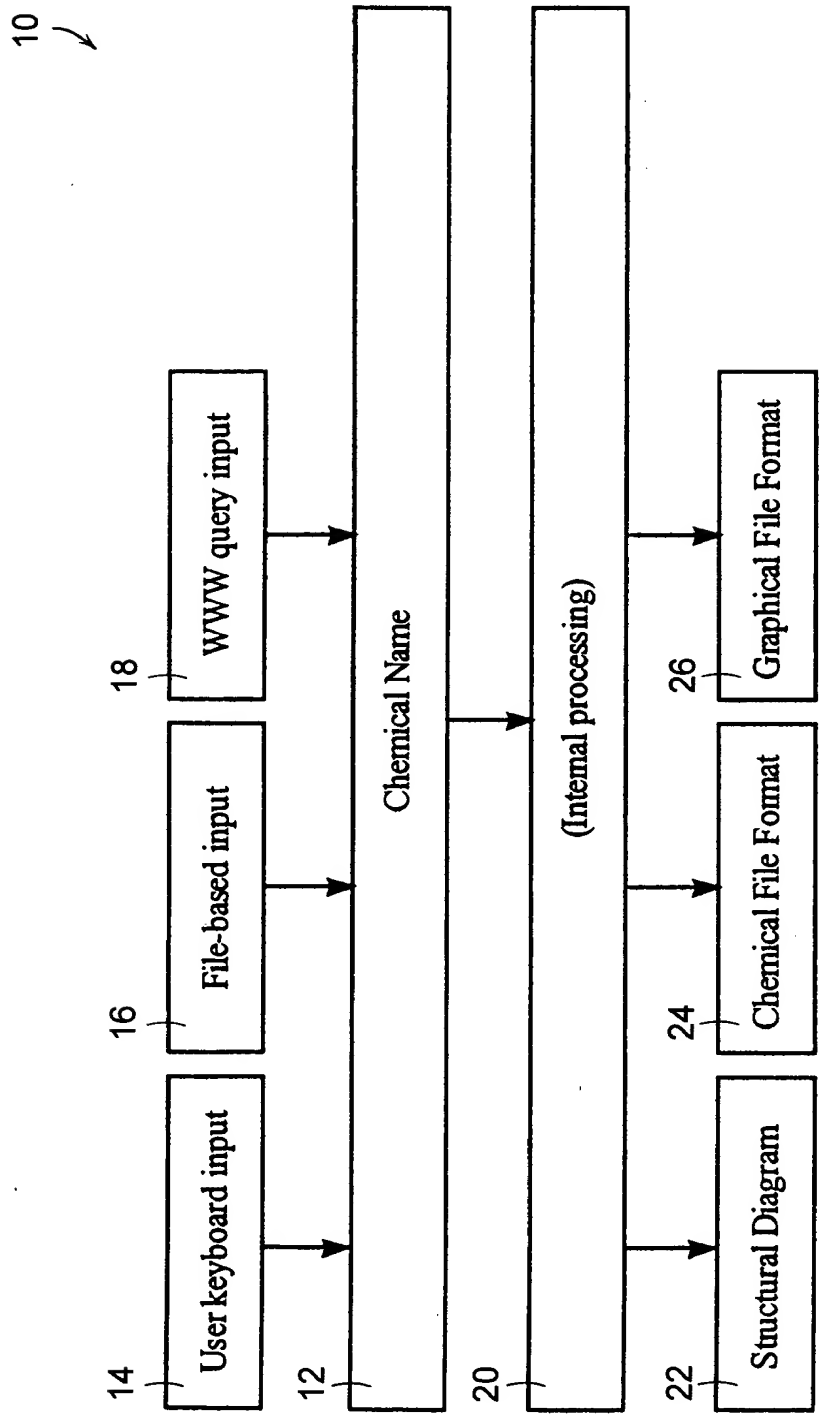

10
User keyboard input
File-based input
WWW query input
14
16
18
12
Chemical Name
20
(Internal processing)
22
Stuctural Diagram
24
Chemical File Format
26
Graphical File Format

FIG. 2

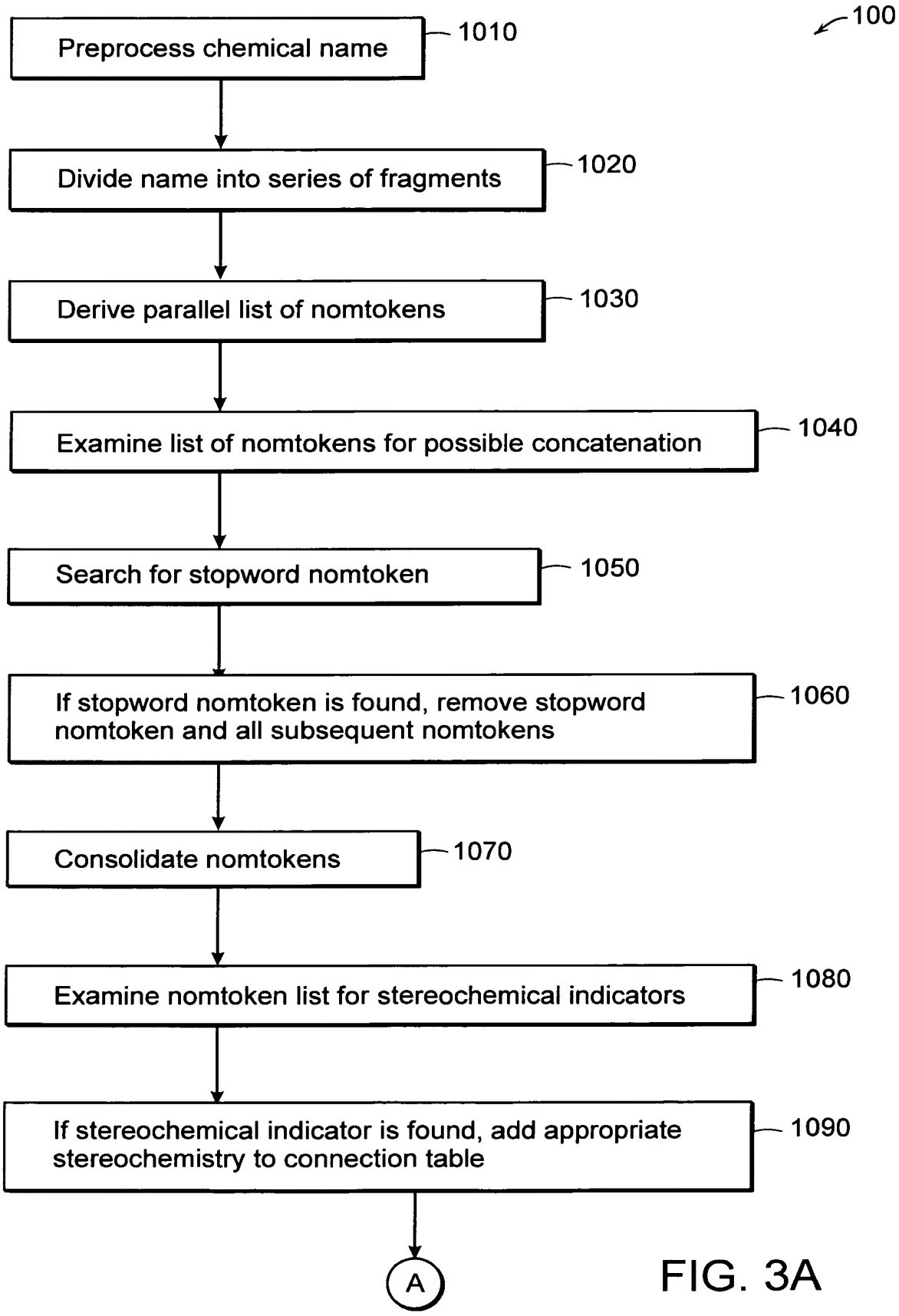

100
Preprocess chemical name
1010
Divide name into series of fragments
1020
Derive parallel list of nomtokens
1030
Examine list of nomtokens for possible concatenation
1040
Search for stopword nomtoken
1050
If stopword nomtoken is found, remove stopword nomtoken and all subsequent nomtokens
1060
Consolidate nomtokens
1070
Examine nomtoken list for stereochemical indicators
1080
If stereochemical indicator is found, add appropriate stereochemistry to connection table
1090
A

FIG. 3A

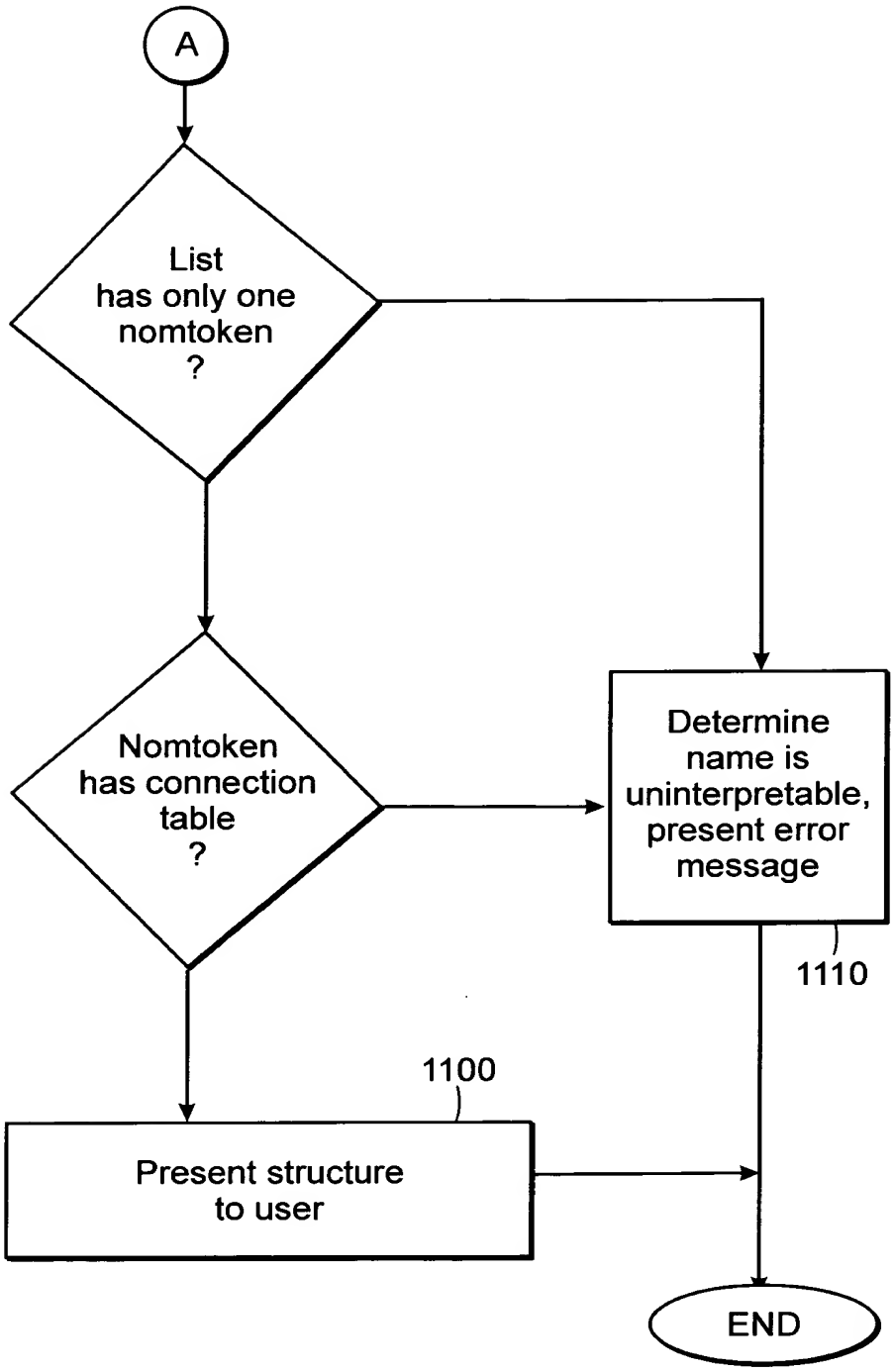

A
List has only one nomtoken ?
Nomtoken has connection table ?
Determine name is uninterpretable, present error message
1110
1100
Present structure to user
END

FIG. 3B

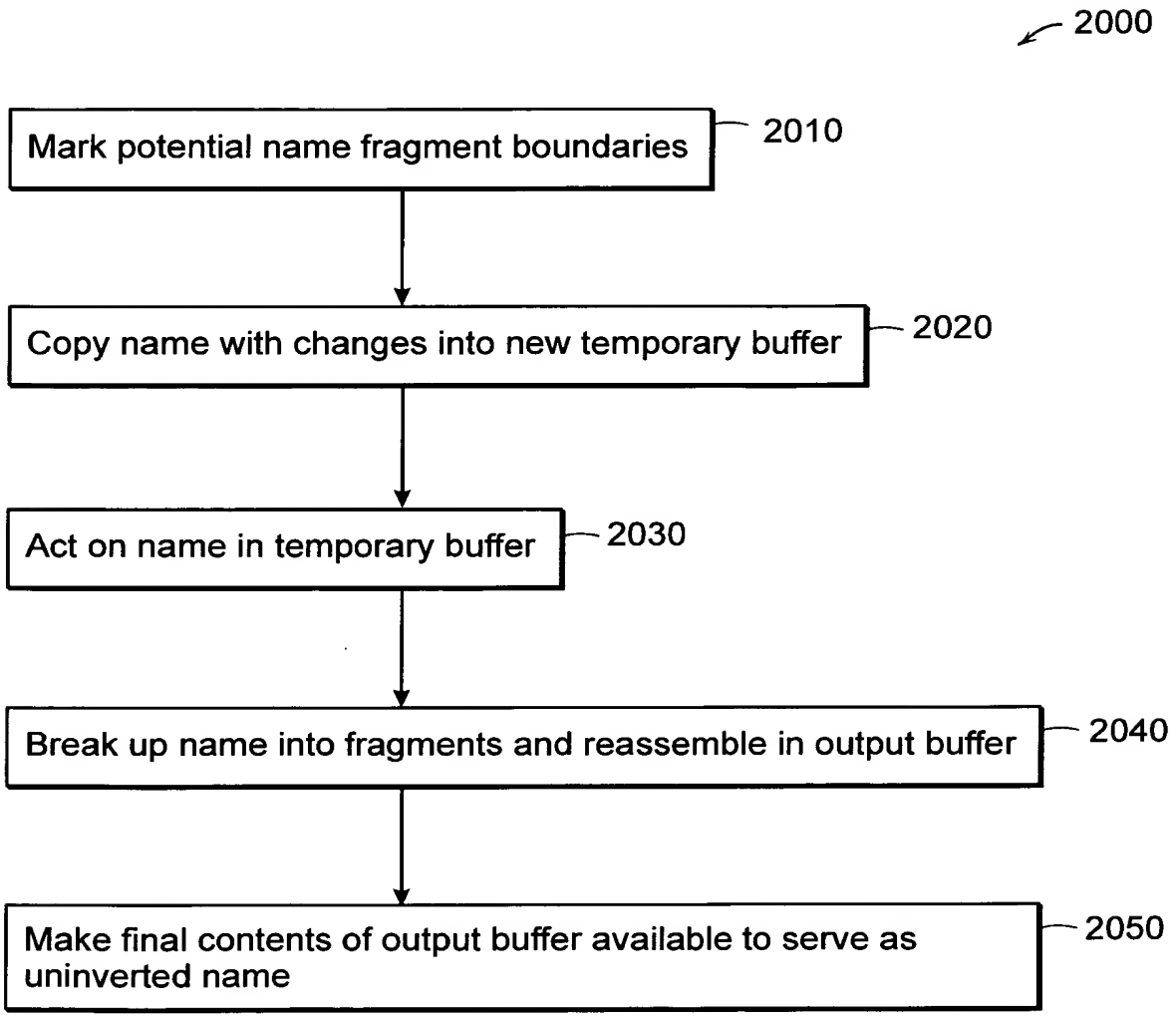

2000
Mark potential name fragment boundaries
2010
Copy name with changes into new temporary buffer
2020
Act on name in temporary buffer
2030
Break up name into fragments and reassemble in output buffer
2040
Make final contents of output buffer available to serve as uninverted name
2050

FIG. 4

Table 1: Strings that cannot terminate fragments to be prepended

"dry"
"ed"
"ide"
"ing"
"mm"
"one"
"rod"

FIG. 5A

Table 2: Strings that cannot initiate fragments to be prepended (note that some strings include a space character)

"in "
"ion"
"low "

FIG. 5B

Table 3: Strings that cannot appear anywhere in fragments to be prepended (note that some strings include one or more space characters)

"and "	"grade"	"radical"
" in "	"granul"	"random"
" ion"	"grease"	"reagent"
"%"	"grit"	"reduc"
"/"	"hbr"	"regular"
"7ci"	"hcl"	"remainder"
"8ci"	"heavy"	"ribbon"
"9ci"	"hydrin"	"rods"
"10ci"	"hydrous"	"salt"
"aas"	"ide "	"scale"
"absolute"	"imine"	"shot"
"acid"	"ing"	"slug"
"acs"	"inhibit"	"soluble"
"aerosol"	"isotop"	"solution"
"amidine"	"ite"	"sphere"
"analy"	"ize"	"spong"
"approx"	"lactam"	"stab"
"assay"	"lacton"	"stabil"
"ate"	"light"	"standard"
"balance"	"lump"	"stick"
"basic"	"mainly"	"sublim"
"basis"	"medium"	"sultam"
"bead"	"mesh"	"sulton"
"briquette"	"micron"	"synthetic"
"catal"	"ml"	"syrup"
"certif"	"mm "	"tablet"
"chip"	"moist"	"tech"
"chunk"	"morphous"	"tion"
"cm"	"mossy"	"titrant"
"coarse"	"natural"	"tone"
"contain"	"needle"	"typic"
"crucible"	"neutral"	"usp"
"cryst"	"nitrile"	"wire"
"deriv"	"pearl"	"with"
"dispers"	"pellet"	"xime"
"dry "	"piece"	"zone"
"dust"	"plate"	
"ed "	"poly"	
"electro"	"porous"	
"ester"	"powder"	
"ether"	"ppm"	
"fcc"	"pract"	
"fine"	"predomina"	
"flake"	"predominantly"	
"foil"	"protected"	
"for "	"puratronic"	
"from"	"pure"	
"glacial"	"purity"	
	"purum"	

FIG. 5C

Table 4.

ether
sulfide
disulfide
trisulfide
tetrasulfide
pentasulfide
hexasulfide
selenide
diselenide
triselenide
telluride
sulfone
disulfone
trisulfone
sulfoxide
disulfoxide
trisulfoxide
peroxide
ketone
diketone
triketone
tetraketone

FIG. 5D

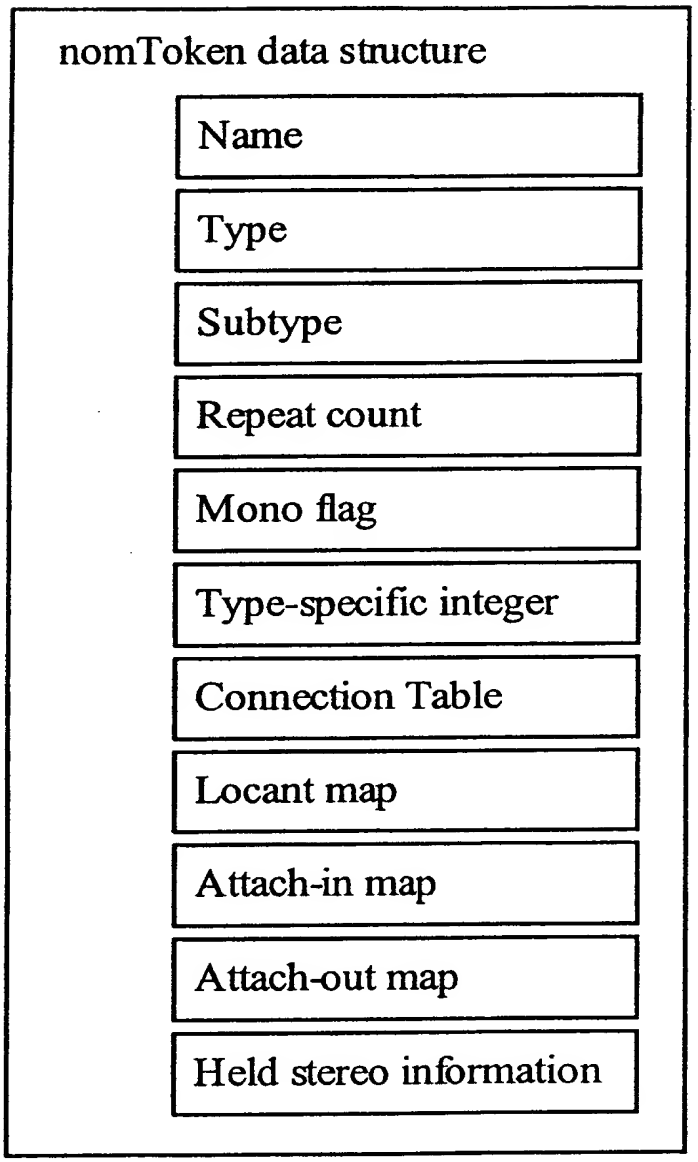

nomToken data structure
Name
Type
Subtype
Repeat count
Mono flag
Type-specific integer
Connection Table
Locant map
Attach-in map
Attach-out map
Held stereo information

FIG .6

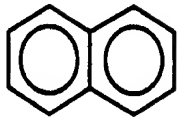
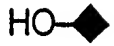
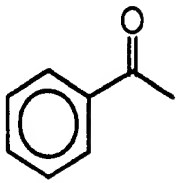
CONNECTION TABLE						
NAME	p	naphth	oxy	phenac	yl	bromide
TYPE	unknown	opfuser	infix	root	enderaminoacid	counterion
SUBTYPE	unknown	unknown	doublebondable	root	yl	ionable
PREV CHAR	'('	'a'	'a'	'a'	'a'	' '

FIG. 7A

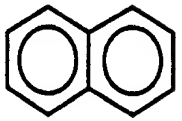
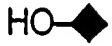
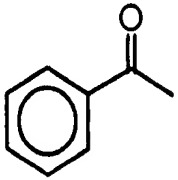
CONNECTION TABLE						
NAME	p	naphth	oxy	phenac	yl	bromide
TYPE	unknown	opfuser	infix	root	**suffix**	counterion
SUBTYPE	unknown	unknown	doublebondable	root	yl	ionable
PREV CHAR	'('	'a'	'a'	'a'	'a'	' '

FIG. 7B

REPLACEMENT DRAWINGS
Serial No. 09/502,810
Filing Date: February 11, 2000
Inventor(s): Brecher

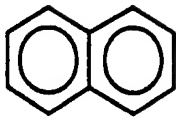
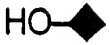
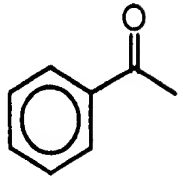
CONNECTION TABLE						
NAME	p	naphth	oxy	phenac	yl	bromide
TYPE	unknown	root	infix	root	suffix	counterion
SUBTYPE	unknown	unknown	doublebondable	root	yl	ionable
PREV CHAR	'('	'a'	'a'	'a'	'a'	' '

FIG. 7C

REPLACEMENT DRAWINGS
Serial No. 09/502,810
Filing Date: February 11, 2000
Inventor(s): Brecher

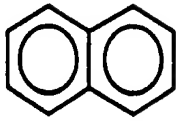
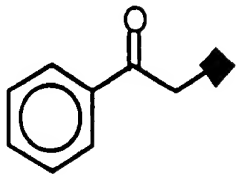
CONNECTION TABLE					
NAME	p	naphth	oxy	**phenacyl**	bromide
TYPE	unknown	root	infix	root	counterion
SUBTYPE	unknown	unknown	doublebondable	root	ionable
PREV CHAR	'('	'a'	'a'	'a'	' '

FIG. 7D

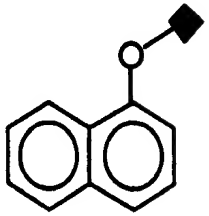
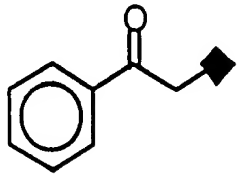
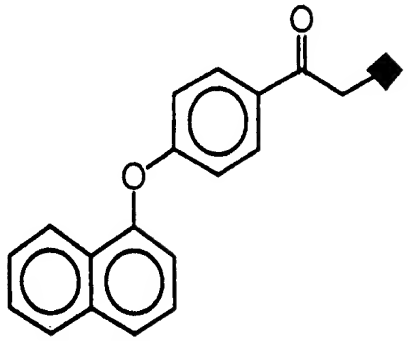
CONNECTION TABLE					
NAME	p	naphthoxy		phenacyl	bromide
TYPE	unknown	root		root	counterion
SUBTYPE	unknown	**infix**		root	ionable
PREV CHAR	'('	'a'		'a'	' '

FIG. 7E

REPLACEMENT DRAWINGS
Serial No. 09/502,810
Filing Date: February 11, 2000
Inventor(s): Brecher

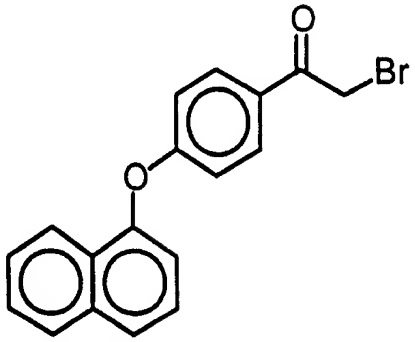
CONNECTION TABLE



NAME	**p-naphthoxy-phenacyl**
TYPE	root
SUBTYPE	root
PREV CHAR	'a'

FIG. 7F

CONNECTION TABLE



NAME	**p-naphthoxy-phenacyl bromide**
TYPE	root
SUBTYPE	root
PREV CHAR	'a'

FIG. 7G

bromide
counterion
ionable

REPLACEMENT DRAWINGS
Serial No. 09/502,810
Filing Date: February 11, 2000
Inventor(s): Brecher